

7E7054

Roll No. _____

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7E 7054**B.Tech. VII Semester (Main&Back) Examination, Dec. - 2015****Information Technology****7IT6.2A Intelligent Systems****Time : 3 Hours****Maximum Marks : 80****Min. Passing Marks : 24****Instructions to Candidates:**

Attempt any **five** questions, selecting one question from **each unit**. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly).

Unit - I

1. a) What is AI? Explain its origin and its various applications. (8)
- b) Differentiate between knowledge base system and data base system (8)

OR

1. a) What do you mean by knowledge manipulation? Explain how uncertainty is managed in AI. (10)
- b) Why LISP used for AI? (6)

Unit-II

- 2 a) What is the need of Inference rules in AI? (8)
- b) Draw the block diagram of fuzzy logic. Explain the concept of fuzzy logic control in brief. (8)

OR

- 2 a) What are the advantages of fuzzy logic control over artificial neural network? (8)
- b) What are semantics? Explain the semantic rules for statement? Also describe the properties of statements (8)

Unit-III

3. a) What is knowledge? Differentiate procedural and declarative knowledge in detail. (8)
- b) What are the different searching strategies used in knowledge organization? (8)

OR

3. a) Explain any matching technique used in knowledge organisation. (8)
- b) How the knowledge manage in organisation? Explain with a suitable example (8)

Unit-IV

- 4 a) Explain premise clauses and conclusion clauses in rule based knowledge representation (8)
- b) What are the different rules properties used for knowledge representation? (8)

OR

- 4 a) Explain forward chaining algorithm (8)
- b) What are source uncertainty? Explain Baye's theorem in detail. (8)

Unit-V

5. What do you mean by knowledge acquisition? What are the different issues should be considered for planning knowledge acquisition? (16)

OR

- 5 Write short note on (any two)
- a) Expert system
- b) Advantages of knowledge acquisition
- c) Learning by induction (2×8=16)